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Original

NOTES ON SOME OF THE CLINICAL FEATURES OF TUMORS, THEIR ANATOMICAL CHARACTERS, MORPHOLOGICAL ELE- MENTS AND THEIR THERAPY, BY TENTATIVE, CONSTITU- TIONAL OR RADICAL MEASURES.

BY THOMAS H. MANLEY, M. D.
NEW YORK.

THE MORBID ANATOMY OF MIX- ED TUMORS IN ITS RELATION TO MALIGNANCY.

In the genesis of new formations springing from or imbedding themselves in any of the organs or normal structures of the human body, it will be always observed that each of the two great oncologic divisions is distinguished by certain definite characteristic features, viz.: First, by

one maintaining, in the course of augmentation, steadily up to the stage of degeneration or retrogression, in its composition, the same essential elements as the matrix structure, from which it originally appeared.

Primarily, in frequency of occurrence the homogenous growths exceed all others, and are quite invariably benign, until, by age, trauma

or some internal organic disturbance they take on new changes and, perchance for the first time, one who is subject of them, becomes sensible of their presence, by local symptoms, and, as a sequence we have a composite, succeeding a simple growth—a mixed tumor.

HETEROGENEOUS TUMORS.

Those growths which present histologic characters radically unlike the elements from which they spring or bear the stamp of aggressive invasion are designated "heterogeneous." In common parlance, they are foreign piratic destroyers, claiming domiciles in the domain of other structures, which they in time encroach on and deprive of their sustenance.

This group embraces many subdivisions, but in all their mixed character is their dominant, anatomical feature.

They seldom appear before puberty and more frequently about middle life, when the vital forces begin to wane, and evidence of diminished physical vigor may be observed. Of this numerous group in point of numbers the dermoid division dominates; which, though most commonly seated in the ovary, the parovarium, the broad ligament or mammary gland of the female, may be found contiguous to any of the epithelial structures of the body, or in either sex.

Enchondromata and adenomata of the benign variety, but a mixed type, are sometimes met with in certain regions of the body, especially those in close contact with osseous structures.

Perhaps, of all the neoplasmata there is none so often associated with a greater diversity of anatomic and morphologic elements than various types of sarcoma; thus in various parts of the same tumor, on microscopic section, we may, in one area find a large invasion of the typical embryonic myeloplaxis of sarcoma, in another the lymphoid elements of simple inflammation widely infiltrate; turning to another section we may find an extensive hypertrophy of the smooth muscle or connective tissue fibres.

We may discover the same heterogeneity wherever connective tissue proliferation may be situated, whether in an organ or tissue. Hence, we have in the modern nomenclature of oncology the terms fibro-sarcoma, adeno-sarcoma, lympho-sarcoma, etc., all of which point to the essentially mixed character of a large number of this class of growths in various stages of their evolution, and this may, too, partly explain the great confusion which to-day obtains, in the classification of various modern authors on surgical pathology.

Besides the two dominant groups of mixed tumors embraced in the preceding enumeration, we have another, which, however, though we must admit belongs to the heterogeneous order, is not, strictly speaking, an essential tumor, but rather a hyperplasia, tending to infiltration and a breaking down of tissue.

It is always of an inflammatory origin, and rarely seen except in connection with the uterus in child-bearing women, being especially prone to succeed lacerations of the cervix, abortions, miscarriages or endometritis from any cause.

Fungous endometritis is a comparatively common lesion, giving rise to a diversity of symptoms, some of which bear a very close analogy to malignant disease. The metrorrhagic discharges of an ichorous material, intermixed with coagula and shreds, may often lead one to strongly suspect epithelial invasion or extensive sarcomatous degeneration of the mucosum. By curettage and microscopic examination of the scrapings we will find every shade of adenomatous mutations; very often a state of "mixed" infiltration, new growth of large gland follicles, with myxmatous, fatty or pigmentary changes in the epithelia. In others, again, the histologic changes rather involve the interstitial elements; there has been a leucocytosis with a free invasion of very large lymph corpuscles, intermixed with the true medullary cells of sarcoma.

The large cicatrix left after a deep laceration in the os-uteri, often induces an eversion and erosion of the mucosum. A rim of velvety granular tissue encircles the lumen of the

cervical canal, which becomes sensitive, painful in coitus, and liable to bleed on irritation.

The keloid elements have taken on pathologic changes, engrafted on the primary stenosed portal; there is a low grade of cell proliferation, consequent on inflammation or, more serious yet, epitheliomatous changes have begun.

The above are types of mixed proliferation; in one instance, one element dominating; in another type, a different element in operation.

MIXED ELEMENTS IN CANCEROUS CONDITIONS OF TISSUE.

It strikes me as more accurate and comprehensive to speak of "cancerous condition of the tissues" than of "cancerous tumors," for the reason that in many cancerous states, there is no tumor of any kind, or tumefaction, other than what is dependent on the coincident inflammation and intumescence of ulceration.

We might as properly speak of tubercular, syphilitic or chancroidal tumors, when we refer to "ulcers"

depending on these specific conditions.

As we will see later, every true cancer is primarily a homologous growth, and hence can only derive its ultimate heterogeneity from degenerative changes. For example, in the most malignant type, the encephaloid, the connective-tissue disappears before the ravages of epithelial ingrowth, while, on the contrary, in atrophic cancer the adenomatous elements are caught and crushed out by contracting bands of fibrous tissue. In fact, cancerous tissues undergo nearly every conceivable variety of transition and metamorphosis.

But as all this, bearing essentially on malignant disease, has only an indirect connection with the subject of mixed growths of a benign character at the outset, it is only necessary to emphasize the fact, that one is peculiar to the evolution of development and the other to degenerative changes, mixed anatomic elements being present in the evolution of one, and disintegration of the other.



Society Reports.

OBSTETRICAL SOCIETY OF CINCINNATI.

OFFICIAL REPORT.

Meeting of March 11, 1897.

The President, Rufus B. Hall, M. D.,
in the Chair.

E. S. McKEE, M. D., Secretary.

DR. JAMES FRANKLIN HEADY REPORTED A CASE OF CEPHAL- HEMATOMA.

The fact that Henning had 230 out of 53,506 births, or 0.43 per cent.; Hofmohl 371 in 59,885, or 0.6 per cent.; and that this is my first case in about 1000 births is the apology offered for this report.

Fourth infant Davis, male, aged eight days, was delivered on February 1, 1897, after a hard labor of 20 hours. The membranes remained intact until a few minutes before delivery. He is well-developed, weighs seven pounds; deeply jaundiced. Situated over the occipital bone, extending from the superior angle to superior curved line is a swelling about the size of a small orange. It is not discolored, not painful, but elastic on pressure. At the junction of the swelling with the bone a well defined hard ridge could be recognized. The lump was not noticed until February 2, and has gradually increased until the present time.

March 8—Child five weeks old, general condition good. Jaundice has entirely disappeared. The swelling has decreased about one-third in size, still elastic and not painful on pressure. The hard line at its junction with the occipital bone has increased. No crackling could be produced over any part of the swelling by pressure.

The evident cause of this swelling has been pressure upon the occipital bone by the cervix uteri. It was not a forceps delivery, and could not arise from that cause. In some cases it is difficult to give a good cause, as this has occurred in breech deliveries.

The treatment has been nil. I must confess the temptation has been very great to empty the contents of the swelling. This course would be supported by Winckel, Olshausen and others. Hensch, Baginsky, Zweifel, Biedert, F. Koenig and others condemn any operative procedure as meddling so long as there are no signs of inflammatory reaction or of suppuration.

DISCUSSION.

Dr. William Gillespie—I was rather surprised to hear Dr. Heady speak of cephalhematoma as so rare. My experience has not extended over a thousand cases by a good deal, and I have seen four cases of tumor of this character. In the first case there was separation. The periosteum was pulled loose from the bone. I opened it and washed it out and had a very good recovery. The three cases I saw afterward I simply punctured and covered with collodion, and had very good results. The books, however, say that is not good treatment, and we should not puncture, but let absorption take place.

In the first place I had used forceps, and no doubt the bruising had something to do with the separation. I believe there is really a larger percentage of cephalhematoma than we are led to believe, and that it is often mistaken for a caput succedaneum. It is located in the same part of the head as saput succedaneum, and the mistake might easily be made.

Dr. M. A. Tate—Like Dr. Gillespie, I was surprised to hear that so few cases occur. I have seen two cases. One was a double cephalhematoma and the other one I saw not long ago in Newport. I let them alone and a good recovery resulted in both cases.

Dr. Thad. A. Reamy—I have seen a number of these cases and have treated them by both methods. I never open them at first, but have opened them subsequently. I have never seen a case that did not recover. The condition, of course, is almost invariably associated with a protracted labor, usually due to the causes that have been indicated by the author of the report. I think in most instances it is quite well to leave them alone. In many cases the contents are gradually absorbed, and as even very simple operations on young children are attended with more danger than in children who are older, I think it is well to wait usually and see if absorption will take place.

Dr. Julia W. Carpenter—I have had experience with but one case, and that recovered without any interference; it passed away in a comparatively short time. The size was that of about half a good-sized orange.

Dr. C. B. Schoolfield—I have had about five or six cases of cephalhematoma in my practice, and in all of them except one I used the let-alone treatment, and they all recovered promptly. The first case I had I punctured and squeezed the blood out, and it promptly returned, and I did not puncture a second time. I do not think puncture is indicated unless there is supuration or something of that sort.

Dr. G. S. Mitchell—I recall but one case that has occurred in my practice, and in that case the expect-

ant plan of treatment was carried out. Like one of the gentlemen who has spoken, I am fearful that many cases of so-called caput succedaneum belong to the category. It is a little surprising to me in the cases reported that this condition of affairs could have occurred, owing to the fact that pressure was not very great and the membranes were not ruptured until shortly before delivery, which would preclude any very great amount of violence to the head. The case that occurred in my own practice was one of tedious and difficult delivery, a forceps case in which the membranes had ruptured early and there was considerable disproportion between the pelvis and the head. The forceps were on for at least an hour. The swelling lasted for a number of weeks and finally disappeared.

Dr. W. H. Wenning—I came in rather late, but from the remarks I infer the paper was upon hematoma. From my own practice I would infer that this condition is somewhat rare, for I have never seen a case of caput-hematoma. As regards the treatment, of course I can only speak from what others say, and I would think the let-alone treatment would be the proper thing in the first place, and wait for absorption; if that does not occur I do not see why we should not open the tumor and hasten the disappearance.

Dr. C. D. Palmer—I have seen a number of these cases, but have never seen one that did not spontaneously recover.

Dr. E. S. McKee—I have had two cases of cephalhematoma. The first was a very rare and interesting variety, viz., intra-cranial. Breech presentation. Body expelled promptly, but head was slow enough to cause some apprehension before successfully delivered; xiii-para. Child well developed and hearty. Saw it every day, and it seemed to be doing well. On the fifth day was fretful, took convulsions and died on the sixth day. Post-mortem 20 hours after death. Found skin normal, but between scalp and pericranium found a large effusion of blood, coagulated, extending over a greater part of the left parietal bone and

not surrounded by any bony ridge. Opening the skull found the bones in a perfectly normal condition, the dura mater healthy, but in the cavity of the arachnoid and corresponding in position to outer tumor found a large and extensive clot of blood, causing a depression of the brain in its deepest part, which was one inch to the left of the posterior fontanelle. Effusion larger than externally, extending down to the foramen magnum. No ruptured vessels could be found. Other parts normal. Cause of death, intracranial cephalhematoma. This mother had three other children to die in convulsions. Might they not have had intra-cranial cephalhematomae, and might there not have been an inherited tendency? Had this case been diagnosed ante-mortem would trephining have been justifiable? This case was reported in the *Lancet Clinic*, vol. ii, 1883, p. 317.

The second case occurred about 15 months ago and was of the ordinary extra-cranial variety. I ordered pressure and the tumor was dispelled. The child is now living and well. This was a rapid delivery, the child being born before my arrival. Mother a i-para.

Dr. Gillespie—I would infer from what I have heard this evening that cephalhematoma is generally regarded as coming on after the time of birth. The cases I have seen surely existed before birth, because the rim of callous thrown around the tumor existed at the time of birth. I think it is Charpentier says true cephalhematoma is due to pre-existing conditions, and not to a difficult labor at the time of birth.

ETIOLOGY OF MALPOSITIONS OF THE UTERUS.

Dr. C. D. Palmer—Bear in mind that there is very little new to say on this subject.

What is a uterine displacement? A position of the organ out of its natural place. Now, that definition, if it is correct, implies that the uterus has a natural place, and that when it is out of that natural place we have a displacement of the uterus. Everybody knows that the uterus is a very movable organ, and

it is a wise provision of nature that it is such. If the appendages were diseased, as often we see them nowadays, and the uterus were not a movable organ, it would be much worse than it is. How could pregnancy go on if the uterus were not a movable organ?

The uterus changes position with the respiratory act, with alterations in the position of the body, with the functioning of the bladder and the rectum, by sexual intercourse and by pregnancy. The position of the uterus is very different when the woman stands erect, when she sits, or when she lies down, and the position of the uterus is different when the rectum or bladder is full than when empty. All of these changes are within the bounds of health, so none of them could be called uterine displacements. Now, we cannot accurately estimate the normal posture of the uterus when we take the dead subject, in whom there has been a supposed normal position of the uterus during life. If that body is frozen of course there must be a change in the elasticity of the tissues. If you freeze any female body and keep the subject on the back, you will have some change in position of the uterus take place. And no doubt the posture of the uterus is somewhat changed by the acts of parturition. The posture in the multiparous woman is somewhat different from that of a nulliparous woman. Now, everybody realizes how much the uterus is changed in its position by the various postures assumed during any local physical examination. How different is the position of the uterus in the woman when you put her in the horizontal posture, in the Sim's posture, in the Simon's or in the Trendelenberg posture. In my experience there is no posture of the body which enables us so carefully to explore the conditions of the pelvic roof and the internal genitalia as Simon's posture. So convinced am I that I always use the exaggerated lithotomy posture whenever I desire to make a careful pelvic examination. And I can make a better examination at the third month of gestation in this posture to detect Hegar's signs than in any other. I

am so confident of, and depend so much upon, Hegar's signs in this the third month that if I do not find these signs I am reasonably convinced that the woman is not pregnant, almost as much so as when I hear the fetal heart sound later on.

The determination of the normal posture of the uterus, and what is an abnormal posture, implies a consideration of what holds the uterus in its normal and what puts it out of its normal posture. Of course, all the ligaments have much to do with holding the uterus in position, and, above all, the utero-sacral ligaments are important. I do not believe there is any other ligament comparable in strength in holding the uterus in position. They are composed of unstripped muscular fibres, and are but the continuation of the parenchyma of the uterus back to the sacrum. They pull, of course, the lower part of the uterus upwardly and backwardly, and, so acting, they naturally throw the upper part of the uterus downwardly and forwardly. That implies that the uterus is a lever of the first class. The power may be below or above, and the weight is at the opposite end, but the fulcrum always has a fixed point. This fulcrum is not at the junction of the body and the cervix of the uterus, but I think it is just above the vaginal vault. This part of the uterus is bound to the bladder as much as the bladder can hold it, and is bound to the rectum in the same way. Here, too, the uterus is bound to the sacrum, and held by the vagina, the pelvic fascia and the pelvic connective tissue and pelvic fat. The vagina has very much to do with holding the uterus in position, much more than some would think. Being attached to the bladder in front, the rectum behind and to the sides of the pelvis, it must hold the uterus. You cannot have much displacement of the uterus without more or less distortion in place of the vagina, and, vice versa, there cannot be much distortion of the vagina without some displacement of the uterus. The way in which the pelvis is related to the perpendicular line of the body varies with different women. If a woman is erect the brim of the pel-

vis will describe the perpendicular line of the body at an angle of 140 degrees to 170 degrees. The greater this angle is the more does the weight of the abdominal viscera, particularly the intestines, come on the top of the uterus, and the back wall of the uterus. The more those weights are so directed the greater the predisposition to the anteversion of the uterus. Of course, the most potent influences in holding the uterus in the normal anteversion are the utero-sacral with the round ligaments. And I believe there is much in the so-called suction power of the abdomen. This suction is noted especially in women who have not undergone parturition, who have a round abdomen and an erect posture.

Now, what are the forces that tend to put the uterus out of posture? We ought to classify the causes under four general headings:

First, anything which tends to increase the bulk and weight of the uterus leads to some displacement of the uterus. Congestion, passive hyperemia and chronic exudations into the uterine wall; in fact, anything, it matters not what, which augments the bulk and weight of the uterus, favors a downward displacement of the uterus at first, and, in time, some retroversion.

Secondly, relaxation and weakening of any of the supports, from lacerations, undue stretchings and diseases. It is almost impossible to have increased bulk and weight without some relaxation of support.

Thirdly, as everybody knows, any increased abdominal pressure from above may favor the displacement.

Finally, an increased traction from below may bring about a displacement.

It is impossible, it seems to me, for anybody to consider any cause which could not be classified under these four headings. This classification simplifies the whole matter very much.

TREATMENT OF MALPOSITIONS OF THE UTERUS BY PESSARIES.

Dr. Thad. A. Reamy—What I have to say further to-night is exclusively upon retro-displacement of the uter-

us. I do not believe that it was the intention when I was assigned to this subject that I should spend very much of your time nor that I should make a speech or paper that should be extensive. But I wish to call the attention of the society to the uses of the pessary in retro-displacements of the uterus. I beg you to remember the normal uterus. The causes of displacements are well known to you all. You cannot have descent of the uterus without displacement. But now we have to deal with retroversion with the pessary. The pessary is ordinarily only an auxiliary to other treatment. The first thing the pessary does is to lengthen the vagina, and if it does not do that it is no account. So far as it may increase the angle of the vagina with the angle of the uterus and not cause discomfort of the woman it aids in the treatment of retroversion. I refer here to the primary conditions; I shall later speak of a pessary which does not do that, but is of value in giving comfort in worse cases. But now we are speaking of a patient who is younger. The obligations of society, the foolishness of custom, have led so many young women to neglect to empty the bladder, or it is impossible for them to do it, and the bladder is kept inordinately full for many hours at a time, and this has a tendency to push the uterus over. Tight lacing and the destruction of the intra-abdominal pressure is another cause. But now we are speaking of a uterus that is retroverted. The vagina is not particularly distended. The utero-sacral ligaments have been stretched in every one of these cases to a slight degree. Now we are speaking of an acute case; therefore, utero-displacement has taken place to a slight degree and there is a tendency for the little virgin uterus to settle down in the little virgin vagina. The introduction in such a case of the narrow Smith pessary or Smith funnel pessary, which can be done without rupturing the hymen, if the hymen is intact, which is not in about half the cases in this country—excuse me for going outside the subject, but so many young girls use the syringe

to wash out the vagina after each menstruation that the hymen is not very often found intact. The hymen is now a thin organ compared with the hymen of the ancient Jew, in which it was a sign of virginity, on which even her life depended. But this pessary can be introduced, if carefully done, without rupturing the hymen. Put the woman in the genu-pectoral position; particularly at first place the patient on the side, because in this position you can repose and examine the condition better than upon the back. Then, having found the condition, repose the uterus before introducing the pessary. Then lubricate this pessary, carry it in and get it behind the uterus. Now the little cylindrical virgin cervix fits into the pessary, the bulb of the pessary makes pressure upon the utero-sacral ligaments. This pressure pushes these ligaments up and makes them act as though they were shortened, and frequently sets up a little irritation; a little inflammatory exudation takes place and the ligaments become shorter. This pessary is self-supporting. It goes up behind the uterus and comes down between the pubic rami and the downward pressure of the uterus simply acts as a leverage power to keep the pessary in place. It lengthens the vagina a little and holds the uterus in place. In this class of cases I have seen many, many cases in which the displacement was completely cured by means of this pessary.

In some cases you will find this pessary will not answer, but the little Hodge pessary will do better. This has the objection that temporarily it spreads the vagina a little, but you must use it very small. The pessary that goes in so tightly that it seems it cannot come down is not the pessary to be used in these cases.

Now we will take up another class of cases. Here is the Albert Smith pessary, which you know is a modification of the Hodge pessary. The modification consists in narrowing one end and dipping it down, and it was intended to act as a swing to lodge between the sacrum and the symphysis. Now we are dealing with a uterus that is larger and in

which the retroversion is more pronounced than in the class of cases to which we have just referred. The uterus has not been enlarged to such a degree that its weight and the retroversion make it impossible for us to repose the organ. But the woman has the discomfort of pressure on the rectum, etc. You carry this pessary up behind the uterus. The pressure then turns the pessary up so it is self-retaining. This it does without fitting very closely. The treatment does not depend on the use of the pessary alone. The woman must go to the physician once or twice a week, the pessary must be taken out, the uterus reposed and the pessary replaced. You may do everything you could if the pessary were not in to improve the condition of the ligaments and change the woman's habits. You simply use this pessary as a crutch on a broken limb until it gets stronger. But do not let the pessary be too large, so as to stretch the vagina.

Let us now take another case. If the uterus is not fixed by adhesion, if it is simply a case of retroversion with the uterus not enormously enlarged, but a retroversion that will cause disability of the woman and become unmanageable later on, and the woman has no laceration of the cervix, what would be the best treatment? If the uterus is not too large and the case has not gone too far I know of no operation in all surgery so absolutely beautiful in its results and so easy to do as shortening of the round ligaments, but if you shorten the round ligaments and do not put a pessary in to hold up the weight of the uterus for several months, until the ligaments have become strong and the uterus has become accustomed to its position, you will find that the displacement will not be cured. It has been said that the round ligaments are intended as guy ropes. They simply keep the uterus from going too far, and do not act as direct supports originally. But after the Alexander operation this is improved. After the operation of trachelorrhaphy I am in the habit of using a pessary for two or three months. Repair the perineum and the cervix if needed, curette and

pack if needed, and shorten the round ligaments if needed, and introduce the pessary at the same sitting and you will probably cure the patient, which you will probably not do if you do not use the pessary. In the virgin and in the cases I have mentioned of married women I have frequently seen a cure effected with the pessary. In cases in which the uterus is very large it is very seldom that we get any benefit from a pessary as large as the one I now show you. When you cannot get the patient to submit to an operation you can sometimes get a good deal of comfort by introducing a simple ring pessary of large size. I have in several of these cases gotten a great deal of comfort, where I could have the patient under observation, by introducing four or five pessaries of this kind, of different sizes, scattered around the vagina in different directions, in a case of complete procidentia. I have a woman now in Greensburg, Ind., who has been under my care for some time, who has not submitted to an operation, and with a hard rubber pessary of this character she has secured considerable comfort.

I could speak of the comfort that might be secured by an anteversion pessary, but the time now is short and I will not now detain you, but take that up at some other time if you will permit me. The pessary not only will prevent the symptoms, but will help the woman to recover complete health in many cases; secondly, in a considerable number of these cases a permanent cure is secured; thirdly, where there are no adhesions and you have made a trachelorrhaphy if necessary, you succeed in the permanent cure of retroversion and the consequent descent of the uterus, with other treatment, by using a pessary that is placed behind the uterus and lengthens the vagina. The primary use of the pessary, therefore, is to restore the normal angle between the uterus and the vagina. The pessary should make pressure, but not sufficient pressure to cause damage of the sacro-uterine ligaments. If you carry this pressure to far you may get a neoplasm there that is very

disagreeable. A pessary made of block tin and bent to suit each case is admirable and answers the purpose very well. Take a pessary in which the curve is not sufficient for your case, or not long enough, you can place the pessary in hot water and with a pair of forceps shorten it up without shortening the curve.

The other thing I wanted to say is to never introduce a pessary at any time for anybody unless you have a guarantee that you can keep your eye on the case, and if they break that guarantee you are not responsible. Never let it be said you left a pessary 10 or 15 years until it was cut out by somebody. If the pessary causes inflammation take it out. If you have to tampon the woman before using the pessary do so, and if you cannot use the pessary don't use it. The right use of the pessary requires more skill tenfold than to make a laparotomy, except some anatomical knowledge and coolness in using the knife.

Dr. G. S. Mitchell—I was very much interested in the remarks of the second speaker, and I am certainly heartily in accord with his views in regard to the pessary. I know of no instrument that gives more satisfaction; I know of no procedure which affords greater relief in a large number of cases than the introduction of a properly adjusted pessary. Like the gentleman, I don't regard the pessary as a curative instrument in many cases, although I have frequently seen a radical cure follow the use of the pessary with other local treatment without any operative interference. I know there are gentlemen, whom we class among gynecological surgeons, who have no use for the pessary. These same gentlemen, with the same propriety and for the same reason, might say there is no use wearing a truss, and yet we do know a properly adjusted truss sometimes results in a cure of hernia, simply because it sets up an irritation that induces an inflammatory process that cures it. And the pessary, by causing a little inflammation, often cures these cases. Thus the pessary sometimes causes what the cellulitis sometimes does, and we have a path-

ological infection of the uterus. That is what we have by the method which has been carried out in the operative procedure described by Dr. Hall; that is what we have by the so-called Kelley method and the so-called Alexander method of shortening the round ligaments. Of course, if we have a prolapsed ovary or an inflammation about the uterus, a so-called parametritis, endometritis or perimetritis, we would not think of introducing the pessary. No one would introduce the pessary where there is already an inflammatory process. There is nothing will cause a heavy, baggy uterus, already in a state of congestion, to diminish its size better than holding it in proper position by a well-adjusted pessary. In the majority of these cases, in which the pessary is to be introduced in retroversion in multiparae, where there is more or less vaginal lesion and more or less injury to the pelvic floor, of course it is proper to make a vaginal colporrhaphy, an operation for cystocele, or trachelorrhaphy, and after all this is done as an adjunct it becomes necessary oftentimes for a number of months, sometimes for a year, to introduce a pessary and hold the organ in proper position.

I have not had any personal experience with vaginal fixation, but I am satisfied that the men who first advised the so-called Duhrssen, of Berlin, operation have discontinued it. It strikes me the operation is not at all proper. Notwithstanding the gentleman has recommended it so highly to-night, I do not believe it is a proper operation; I know any operation could be performed by him with ease, he is such a dextrous operator, but the ordinary operator would find this operation one of more or less difficulty. I can hardly conceive of the operation not being attended with danger. After we have made the colporrhaphy and operated on the anterior wall, or whatever is necessary, it seems to me the best radical operation is to shorten the round ligaments. Alexander says one should not attempt this operation until he has made five or six such operations on the cadaver. It is a very difficult matter to pick up

the round ligaments. The danger from hemorrhage is very trivial, and as to the formation of scars that argument amounts to nothing at all.

Dr. Edwin Ricketts—When the question is asked, what is the normal position of the uterus? it can be answered a good deal in this way: What is meat for one person is poison for another. The question of malposition is one in which I think there has been a good deal of unnecessary scientific speculation. In regard to the question touched upon by Dr. Reamy, that is the version backward, in which he spoke of the distended bladder with the constipation habit and the disposition or indulgence in matters pertaining to society, he did not cure that patient until he had restricted or cut short, so to speak, the distended bladder business and had taken her out of society, and I believe the same end could have been secured by taking the patient out of society and regulating her habit, without the use of the pessary. These patients many times, in connection with relief of vicious habits, are often greatly relieved by being placed upon their face, especially at the menstrual time, for a specified time. I cannot understand yet why so much is claimed for the pessary. I think that, theoretically speaking, it is very nice, but it is a good deal like a man lifting himself over a fence with his boot-straps, and for a man to make the statement that the pessary is of itself riding easy, so to speak, without making undue pressure on one or two sides of the vagina, is a mechanical measure I cannot understand. It has to have bearing somewhere for the uterus to ride, so to speak. The question of surgical interference for posterior versions, as suggested by Dr. Hall this evening, while I know it has been claimed by some gentlemen that the originator of this operation has discarded it, yet I do not think he has discarded it entirely. It don't make any difference about that; any gentleman who could have seen the operation in the hands of Dr. Hall as I have, and could have seen the result of those cases and the freedom from pain those patients have now

in comparison with the pain they had previous to the operation for years, I am sure would be ready to give due credit to the operation. I do not care who goes back on the operation, I think we have a right for observation in Cincinnati as well as anywhere else. Whether this operation is to be the operation or not, it certainly is going to do away with the pessary. As to the position of the uterus as described by my friend, Dr. Reamy, which must be tilted forward in order that we may not have procidentia, of course that is correct. I do not think the anteversions amount to much as a rule; the retroversions are the ones we usually have to deal with. When these cases cannot be cured by relieving the distended bladder and placing the patient on her face, when anything is demanded I think the operation devised by the German gentleman is the one that will be considered more in the future than in the past. And you will be surprised how readily you can turn the uterus out, and the danger of hernia is practically nil.

Dr. Carpenter—I was glad to hear the favorable words from one of such experience as Dr. Reamy upon the successful use of properly adjusted pessaries. We always like to hear something commended that we have succeeded with ourselves, and it has always seemed to me that those who condemn the use of pessaries wholesale are ordinarily influenced by seeing those used which are too large and where damage was done. Too many persons, especially those just graduating, have the idea that a pessary must stretch the parts in order to give support, and that is one thing that produces many bad results. A properly adjusted pessary is very movable, and will not stretch the parts. If one will try it in that way in suitable cases good results will be secured. Whenever I read anything on the subject of the normal position of the uterus I wonder where in this age they find the individuals in whom they can find that out—that is, in the adult. If you take a little child of course you can get many of those who are in a state of nature; but when

you come to the absolutely normal position in the adult of this age I do not know where you can find it, unless those investigations are made among Indian women who are in a state of nature. You can find out what the usual position is, but whether that is natural or not is another thing, because in every nation the clothing of women is of such a nature as to make pressure from above downward, and whether the organs are now in their absolutely natural position or not is a thing to be very much questioned.

Dr. Wenning—It has been said, with a good deal of truth, that a pessary in a good many instances is a necessary evil, and certainly it is an evil in the hands of a great many individuals. I make these prefatory remarks because we all encounter cases in which the pessary has done much harm, but I think it is because so many have not the proper idea as to what the pessary is intended to accomplish. We should not simply introduce the pessary and send the patient on without further care. I have very little to add to what has been said on this subject. I am heartily in accord with what the second speaker said about the pessary with one exception, and that is the use of the ring pessary, which does what a pessary above all things should not do, and that is it stretches the vagina. I have seen more ring pessaries in patients in whom the pessary was introduced by a practitioner not accustomed to introducing a pessary than any other kind of pessary. I need hardly mention the fact here that a pessary must exactly fit. If a pessary is too small it will do no good, and if it is too large it will stretch the parts. I think it requires greater nicety to properly introduce a pessary than to make even many of the gynecological procedures, and it is only one who is accustomed to examining the uterus who can say what kind of a pessary should be used.

One thing was not mentioned in the anatomy, and that is this: In my experience no pessary of any kind will do any good unless there is a normal rigidity of the uterus. When there is a pathological softening the

pessary does often more harm than good. I think the uterus itself is the lever which is brought into requisition. If the cervico-vaginal junction is softened, if there is a pathological flexion, you invariably increase the trouble. So I think there must be a normal rigidity of the uterus before you can cure a version.

Now another thing as regards the determination of whether a pessary is properly placed or not. Of course you all understand that for retroversion the proper position for the introduction of the pessary is the Sims position, so that you are sure you have the pessary in the proper position. Of course it is understood that the pessary cannot correct the position of the uterus; the position of the uterus must first be corrected and then the pessary introduced. I first put the patient on her back and have her bear down, and then if I find the pessary is properly placed I examine the patient in the standing position and have her bear down and am thus enabled to determine whether there is a proper mobility of the pessary. If the pessary is too small it will slip down into the vagina, and if the pessary remains fixed too tightly above it is too large.

Then there is another thing to be taken into consideration, and that is the abdominal pressure. I never have a woman wear a pessary for retroversion who has borne many children without having her wear at the same time a well-fitting abdominal supporter. I believe the relaxation of the abdominal muscles forces the uterus down on the pessary, and this continued pressure in the erect posture is likely to cause the trouble to return again. The proper adjustment of an abdominal supporter, which will aid the abdominal walls in holding up the weight of the intestines, is very important.

Dr. Schoolfield—I feel very much obliged to the last speaker, especially for his remarks about the use of the pessary. I have had very little success with the pessary, and am not a strong advocate of it. His remarks, though, in regard to it I think are very applicable, and I think, too, that unless a pessary does

fit as accurately as a shoe should fit it does no good. I think too many times the pessary is too long. An ill-fitting pessary, and a great many of them are ill-fitting, being left in the vagina produces a great deal of injury and no good. I remember some time ago removing a wooden pessary, a round ring, left in the vagina something over a year, and it had so embedded itself I had to use an instrument and break the pessary in order to get it out. Of course that results from the lack of observation of the patient after the pessary was put in.

The question of the operations for the relief of retroversions is an interesting one, and those that restore the organ by replacing the conditions as nearly as possible to the natural are the ones which will do the most good. It seems to me the shortening of the round ligaments according to the Alexander method is the nearest to the physiological way of replacing the uterus in its proper position. The Mackenroth-Vineberg operations of replacing the uterus through the vagina will replace the uterus, but the drawing the uterus forward under the bladder, it seems to me, would cause a great deal of bladder trouble, and it would also cause the cicatrization of the anterior portion of the uterus, and would interfere with gestation in the same way that the ventral fixation does. I believe that ventral fixation is a delusion and a snare. I have done it and I have seen the results of it, and we see the reports of it in the journals, and I believe those who do the most of it are the ones best satisfied with it. A good many operators who a few years ago did ventral fixation are now abandoning it. Alexander himself and Edibohls, who has operated perhaps the most frequently of any operator in this country by the Alexander method, seem best satisfied with their results. I have never seen the operation spoken of by Dr. Hall, but it seems to me that next to the Alexander operation it is the most plausible and reasonable method that we have, because it is a shortening of the round ligaments. But it seems to me that fastening the round ligaments to the vagina is

drawing the uterus too much forward and interfering too much with the functions of the bladder. It seems from a physiological standpoint that the Alexander operation would certainly be much more desirable, although it is probably as difficult, if not more so, than the Alexander operation.

Dr. C. L. Bonifield—In regard to the use of the pessary, I think a mistake that is very frequently made which interferes with getting good results from the use of the pessary, particularly in retroflexions, is that the curve of the pessary is too sharp; in fact, they are usually too sharp when we buy them. They do not give pressure in the proper place, and while we may push the uterus up in the pelvis we do not straighten it out. I have gotten very good results by straightening the pessary somewhat. The Hodge pessary I have found very much inclined to turn around and get crosswise in the vagina.

In regard to vaginal fixation, I was in Berlin at the time Dührssen and Mackenroth were interested in this operation. I purchased a sound Dührssen devised to bring the uterus forward, and brought it home with me, but have not used it. I was at first thoroughly determined to do the operation, but upon considering it further I have not done it. My lack of familiarity with the German language rendered it impossible for me to get all out of what was said by Dührssen and Mackenroth. Mackenroth made his incision longitudinally with the vagina, while Dührssen made his transversely. I saw Mackenroth do the operation and also saw Martin do it after the method of Mackenroth. I saw Dührssen also do the operation. Dührssen was in the habit of doing it in his outdoor clinic. After the operation the patient would wait in an outside room for two or three hours, and then he would pay her expenses home in a second-class cab. I examined several of these cases after two or three months, and the uterus certainly was anteflexed, but it possessed that disagreeable feature that the uterus always has after

being fixed by operation—that is, it is fixed and not freely movable as it naturally should be.

Dr. Hall (in closing)—I believe where we differ largely on the pessary is the selection of the proper cases in which the pessary will do any good. If we do that we can relieve many of our patients, and the pessary then is just what the truss is, a makeshift for comfort, for temporary relief, and those of our professional brethren who do not use the pessary at all do not use all the appliances at our hand for the best interest of his patient.

Now a word in defense of my position in the paper. As to the gentleman who abandoned the operation, I will say he abandoned it on the same ground that Leopold and that school abandoned their operation, because there is too firm a fixation of the body of the uterus to the abdominal wall. Interference with the rise of the uterus in pregnancy followed the early operations. The new operation, and the one I was trying to describe to-night, is not such an extensive fixation. When you are through the operation it is brought forward and tacked, so if the woman becomes pregnant the uterus can enlarge just as if the woman had not been through the operation. One man reports seven cases in which the women went through pregnancies all right. I believe if any of my patients become pregnant they will go through as well as anybody, as far as the operation is concerned. I have made the Alexander operation many times, and theoretically for bringing the uterus forward it is all right. Practically it is all right. It is the best operation for bringing the uterus forward for that purpose alone, but the operative danger between the two operations is markedly greater in the Alexander operation. No one who has seen the results of the Alexander operation will doubt that there are a good many cases in which hernia follows this procedure, and a woman with two hernias is about as

bad off as a woman with retroversion. I believe if my wife had a retroverted uterus, before I would let her have an Alexander operation, with the danger of hernia, I would prefer to let her have the retroversion, and that is what I advise my patients. Of course, in a lean subject there is less danger of hernia than in a fat subject. Yet if the operation I have described this evening will do the same thing, as far as the result is concerned, it is to be preferred to the Alexander operation, even though it is more difficult than the Alexander operation. The man who is used to doing this kind of work will do it all right. And you do so little injury to the woman by that operation. Not one of the patients I have operated upon in this way has complained of pain and discomfort nearly as much as for a repair of the cervix or of the perineum.

Dr. Reamy—The very intelligent remarks of Dr. Wenning makes it necessary for me to call attention to one point. The doctor is correct in his statement that the pessary does not act as a lever on the uterus, but the uterus calls into requisition the lever action of the pessary. The remark of Dr. Bonifield I have verified hundreds of times. This pessary is about the correct shape; it is almost straight. The other remark I wanted to make is in reference to the shortening of the round ligaments by the Alexander operation or some modification of that procedure. I am sure any man who thinks this operation is difficult is someone who got his conception from hunting for the round ligaments after they are flattened out. If he will go down between the sacrum and the symphysis and make a dissection, striking an inch or three-quarters from the spine of the pubes, he will readily find the round ligament. I do the operation sometimes one way and sometimes another. Young Martin, you know, fastens it to the urachus if he can find it.



Editorial

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DANGERS OF ARTIFICIAL RESPIRATION.

A recent issue of the London Lancet gives an interesting account of the attending dangers of artificial respiration in anesthesia.

The most obvious thing to do when a patient fails to take air into his lungs while he is under the influence of an anesthetic is to adopt one or another form of artificial respiration. In most cases the treatment is a correct one, and leads to a successful recovery of the patient. It must not, however, be assumed that in every case in which the breathing stops artificial respiration is the first act to be performed or is it a proceeding free from danger. In more than one instance resort to this method has led to fracture of the ribs, owing to some excited assistant pressing too vigorously upon degenerate bones. There must in every case be a cogent reason for trying to

force air into the chest and a clear knowledge that at the same time no impediment exists in the upper air passages to its free entrance and exit. There have been numerous cases in which foreign bodies—balls of worsted, artificial teeth and masses of undigested food—have become engaged in the air passages, and have only been discovered after futile efforts at artificial respiration had been abandoned, as they had failed in their object. Not infrequently when abdominal section has to be performed to relieve intestinal obstruction there is a fatal tendency for the stercoraceous vomit so liable to occur during the operation to get sucked back into the larynx. This is the great peril of the anesthesia in such cases, and every instance of death under it is a warning. A man aged 58 years, exhausted by disease,

was operated upon to relieve obstruction, caused, as was found at the necropsy, by annular carcinomatous growth constricting the intestine at the ileo-cecal valve. The general condition of the patient was very bad, and the operation had to be delayed by the patient's refusal to give his consent, so that at the time he was given the anesthetic his state was a grave one. He took the ether well. What degree of anesthesia was obtained we are not told. In ten minutes the abdomen being opened and the surgeon being engaged in handling the intestines to discover where the constriction was, the patient commenced to vomit. He became livid and a gurgling was heard in his trachea. Artificial respiration was resorted to for a short time without improving the man's condition, and then tracheotomy was rapidly performed. A quantity of stercoraceous vomit issued from the tracheal tube, and although the artificial respiration was kept up the man died. There can be no doubt that in cases where it is certain that vomit has entered the lungs the first thing to do is, as was

done in the present case, to perform tracheotomy and draw out with some pump all the fluid which can be got from the air passages. Artificial respiration when done by pressing upon the ribs and moving the arms can only force the stercoraceous vomit into the finer bronchi and effectually cut off any chance of the patient's recovery. It has been suggested that preliminary washing out of the stomach lessens the risk of vomiting, but it is not at present certain how far this can be relied on as a safeguard, since, as the stomach is emptied, a renewed regurgitation from the intestines is liable to occur. It seems probable that the inevitable manipulation of the intestines induces the reversed peristalsis which culminates in vomiting. Were this danger considered imminent it might justify a preliminary opening of the trachea and plugging above the tracheotomy tube, so as to effectually shut it off from the pharyngeal space. Whether such a procedure would increase too much the peril of the case experience alone can decide.

MATERNITY CHARITIES AND UNMARRIED WOMEN.

An attempt to define the normal relation between childbirth and the work of charitable relief might at first sight appear to be superfluous. Yet the fact remains that such a definition is still unknown, or if it does exist is too imperfectly understood to command general approval. Where the antecedents to matrimony have been quite regular there is of course no difficulty save that of the expense incurred. The case of illegitimate childbirth on the other hand is quite different. Questions of moral responsibility have entered in here, and the consequence is that public institutions which freely accept as inmates poor and deserving married women have no offer of help

for a maiden mother. While we are willing to spare by every due consideration the feelings of the former class with regard to social surroundings, we cannot but think that the distinction in treatment so favorable to them is unduly neglectful of their erring sisters. It cannot be defended on the ground of charity unless we accept the much wider proposition that every mischance of illness which is the direct outcome of a vicious practice is outside the province of the charitable healer. The close connection between illegitimacy, concealment of birth and infanticide needs no explanation. Such preventive measures as have hitherto been employed to destroy this

mischievous and criminal combination have not been highly successful. The question remains whether they should not be supplemented by such public and charitable aid as is plain-

ly needful to secure the safety of mother and child at the time of birth. We would answer this question in the affirmative.

THE ACTION OF X-RAYS ON MICRO-ORGANISMS.

Bonomo and Gros. (*Giornal. Med. del Regio Esercito*, an. 45, n. 6) have made researches in the military hospital at Rome on this subject. They subjected cultures of various micro-organisms (*B. subtilis*, *B. tuberculosis*, *B. anthracis* and others) up to the third generation to the influence of the x-rays, applied vertically, for a period of about three hours each day. Some retardation or diminution of vitality, vegetable and pathogenic, was observed in every case, but the change was for the most part very slight, except in the case of *B. anthracis*. With this microbe a well-

marked diminution in motor activity, modification of chromogenic power and loss of spore-producing property was observed. With this, too, a complete attenuation of pathogenic effects was observed, so that the authors feel it might be possible through successive cultures exposed to the X-rays to make the *B. anthracis* innocuous. No such marked results were obtained with the other micro-organisms under the influence of the same rays. In every case such effects as were observed were more noticeable in the later than the earlier cultures.

SYPHILITIC ULCERATIONS.

The ulcerations resulting from the breaking down of pustular, tubercular and gummatous syphilides are frequently of a rapid, destructive character and exceedingly rebellious to treatment. Aside from the internal use of mercury and potassium iodide it is usually necessary to resort to local applications, and of the numerous topical remedies recommended the most prominent place is now assigned by many dermatologists to euophen. From a study of this drug Dr. J. A. Cantrell, professor of diseases of the skin in the Philadelphia Polyclinic (*American Therapist*) writes as follows regarding its utility in ulcerations of syphilitic nature:

"Eichhoff reached conclusions in

favor of its action in syphilitic ulcerations after dusting these cases with the dry powder, while Migneco records excellent results also in ulcerating gummata, and Shoemaker by employing it both in 10 per cent. ointments and as a dusting powder in like ulcerations. Gottheil reached similar conclusions in regard to the use of this agent in ulcerations due to syphilitic infection, while Oeffelein and Neuberger in a joint paper publish effective cures and later Ullmann records similar experiences.

"Gilbert refers to beneficial effects in varicose ulcers of the leg which were dusted with the powder at night, and dressed with a 2 per cent. ointment during the daytime, and in which cases granulations soon

formed with cicatrization in three weeks. According to experiences gained during the time in which this agent was given trial in my clinical and private work I am inclined to believe that euophen is of some value, as in the dressings applied to the syphilitic variety of ulceration, the treatment assisting greatly in restoring the parts to their normal condition. By using dusting powders in varying strengths and with the assistance of the iodide of potassium internally results were reached usually in about two or three weeks; at first, by simply applying the powder until granulations were noted, and then making a change to an ointment it was found to act more beneficially in this manner. In all

the experiments it was noted that the result was gained in a much shorter time than with the most of the iodine derivatives. In the non-syphilitic abrasions or ulcerations the drug acted similarly and with the change from the powder to the ointment the effect of the drug was enhanced. But care must be exercised that at the time in which granulations seem to be showing a change is made to an ointment, because if not done at the proper time one will be confronted with an over-abundant formation of healthy tissue, which is greatly to be deplored on account of the manner of treatment necessary for its removal, which may be detrimental to the result already achieved in the former dressings."

THE VIRGINIA HOT SPRINGS—AN IDEAL HEALTH RESORT.

Among the mineral springs resorts of the United States which will not only serve as a model for other resorts in this country, but is equal in every respect to such celebrated European resorts as Carlsbad and Aix la Chapelle, is the Virginia Hot Springs, located in the Hot Springs Valley, at an elevation of 2500 feet, on the Chesapeake & Ohio Railway. All the natural conditions unite here to form an ideal retreat for invalids. The surrounding mountains afford protection from violent atmospheric changes and insure a delightful temperature, free from extremes in summer and safe in winter. The scenery is bold and picturesque, and outdoor exercise is a feature of the place. The magnificent bathing establishment is provided with every modern appointment, and every bath is given with natural hot water.

In addition to the Hot Springs

there are magnesia, sulphur, soda-lithia and alum springs on the grounds, and the very valuable and celebrated waters of the Healing Springs, which are located but a short distance from Hot Springs, are in constant use at this resort.

A strictly modern hotel, "The Homestead," was completed in the spring of '96, and few hotels are better fitted to supply every want and gratify every taste.

Being located about midway between New York and Cincinnati, the Springs are very convenient of access—the through service of the Chesapeake & Ohio being unsurpassed by any line of railway in the United States.

Full information may be obtained by addressing Mr. H. W. Fuller, G. P. A., C. & O. Ry., Washington, D. C., or Mr. Fred Sterry, manager, Hot Springs, Bath County, Va.



IMPROVEMENTS IN ELECTRODES.

Recently H. A. Dow, Battle Creek, Mich., calls attention to a set of "soluble electrodes" designed for the treatment of parts lined with mucous membrane. They are made of hard rubber. Inside is a copper wire, which is the conductor and in positive galvanic applications combines the hydro-electric douche method with metallic electrolysis. Any other metal can be used if desired. The set comprises six electrodes, with a two-quart syringe bag, to contain the normal salt solution for douche treatment. Nos. 1 and 2 are for rectal use, No. 4 for vaginal and Nos. 5 and 6 for the female and male urethras. They are convenient means of simplifying a valuable technique. In many cases no medium of contact with delicate tissue is equal to water, and the Dow set should be very useful.

Felt-covered electrodes, especially suitable for dispersing pads for all galvanic currents up to high intensities obviate the need of clay in most cases.

In my remarks on electrodes in my book upon Treatment of Disease by Electric Currents these are described and instructions given for minimizing resistance. The felt used is three-eighths of an inch thick and of fine white wool, which is first cleansed of all fatty matter and then

holds moisture and conducts a large dosage with comfort. A little care will enable the operator to apply 150 mil. in uterine treatment with this form of electrode without resorting to the mussy clay.

They can be made in any desired size or shape and are covered with a backing of soft rubber. A set of six sizes from 2x2 up to 7x10 will be found very useful.

They are the most practical, simple and satisfactory galvanic electrodes for the purpose that I have ever employed.

ELECTRICAL INJURIES MISCALLED X-RAY INJURIES.

At this date it might be supposed that sufficient had been published in prominent journals to inform the entire profession of the cause of the occasional dermatitis reported by a few workers with X-rays.

There are, however, many who still assume that the X-rays themselves cause the burn, though a little reflection would show that if this was true there would be thousands of cases instead of a few dozen. The main point I now wish to make refers to the use of static apparatus with Crookes tubes.

Several correspondents write me that they understand me to claim that the static current does not

cause a burn, and go on to notify me of a case reported. My experience demonstrates that with proper management the direct static current tends so little to cause injurious action upon the skin that it is easy to avoid all trouble, even when working continuously with tubes for several hours. I have, however, seen evidence that by condensing the current through Leyden jars and by non-expert methods of employing tubes which really abuse the apparatus, even without condensers, and by persisting for a long time, a dermatitis can be set up.

To set forth my early and present position in regard to static burns it may be best to quote from what I have previously written:

"While there is no mechanical device which cannot be abused, yet if any physician with a Holtz machine and one of the author's tubes would start out in the morning with the deliberate purpose of inflicting upon himself a 'dermatitis Roentgen' by nightfall of a long summer's day he would be baffled in the attempt if he employed the proper method.

"The direct static discharge of high potential and infinitely small amperage does not produce electrolytic or chemical effects upon the human tissues without X-rays, and consequently does not produce such effects in conjunction with X-rays."

If the current is transformed by condensers or backed up by the resistance of a high vacuum tube, and if a powerful spark interruption is maintained, the current is altered and my statements, above quoted, do not apply to the condition. Everyone who uses a static machine certainly knows that by the use of a covered electrode vesication can be caused by a static application, but this ancient fact does not make a sedative breeze vesicate. The term "proper method" must define the scope of my assertion that the static current is safe, for it certainly does

no harm ordinarily, and must be used under altered conditions to cause dermatitis.

As proof of this there comes to my notice the experience of an X-ray exhibitor whose hand is now inflamed to a moderate degree. He tells me that during a special exhibit he exposed the back of his hand at close range for a total of 20 hours, divided between two days. The current was pushed to its utmost. There were but two tubes employed, one being kept going constantly for six hours. They were the "Monell Static Tubes" and remained in working order despite this severe use.

In about ten days a dermatitis appeared, but has not proved to be very severe. A powerful spark was used and the hand often was in actual contact with the bulb.

This bears out all my assertions about the slight liability of this form of current to do damage in X-ray work. The operator was sufficiently skilled in handling tubes, but was not familiar enough with static apparatus to regulate the current nicely and avoid an excess when not needed.

Had this been done he would have been able to keep his hand free from injury, especially if he had used reasonable caution as to distance. He, however, had a firm belief—not correctly understood—that it was impossible by any use of static electricity to cause an inflammation of the skin.

Had he not been so convinced of this by his previous immunity while exhibiting for several months, often subjecting his hand to long exposures—once as long as six hours without harm—he would have been more careful.

So rarely is an injury caused by operators using static machines correctly that alarm may be dismissed from patients' minds and they may be assured of entire safety.



Clinical Medicine.

In charge of DR. J. J. MORRISSEY.

THE TREATMENT OF CONSUMPTION BY PROFESSOR VON LEYDEN.

J. J. MORRISSEY, A. M., M. D.

To the general physician one of the most important papers read at the International Medical Congress was that of Von Leyden, of Berlin, on "The Present Modes of Treating Consumptives and Their State Control." The subject may be considered to be of a somewhat hackneyed character, for not only the medical press, but the public prints are daily and weekly filled with discussions on consumption, and yet the last word has not, nor will not, be said, we fear, for many years concerning this dread disease, so that if any new measures are considered for the relief of that great army of suffering humanity afflicted with tuberculosis they should immediately claim our attention. Unlike many of the acute diseases we have to contend with in our daily practice, the proper treatment of phthisis depends far more upon preventive methods than the adoption of any measures which have for their ultimate aim the destruction of the insidious bacilli.

Thus we have a verification of Oliver Wendell Holmes' dictum that there are many diseases which should be treated a hundred years before the patient is born. In this category we may place consumption, which to an eminent degree may be treated successfully ere we arrive at

the stage of applied medicine. We do not believe that the disease is transmitted directly from the parent to the offspring, but that the tendency or predisposition—call it what you will—is handed down is unquestionable.

There must be some inherent peculiarity of structural formation, requiring but slight pathological modification, to develop retrograde tissue in which the bacilli rapidly thrive. The susceptibility to the encroachment of tuberculosis is especially well marked in some families. This is a matter of common observation and not entirely explained by environment; the latter may be a powerful factor in rapidly bringing to the fore the hidden causes of the diathesis, yet it does not explain but a part of the problem. One member of a family may entirely escape the death warrant issued against all the others dying from phthisis, and die of some other disease foreign to any affection of the lungs. On autopsy there is found no disintegration of lung tissue, no circumscribed focal point around which the disease is centralized, and yet his surroundings and mode of living may be the same as those who died. It is impossible to explain these inconsistencies, as they appear

to us, of nature. "Survival of the fittest" is but a trite phrase, which only beclouds our intelligence and dwarfs our efforts.

Professor von Leyden, whose brilliant achievements in every department of medicine lends an added lustre to any statement he may make upon this subject, does not believe in heredity, but claims that in the majority of cases the disease is transmitted to children by contagion from their parents and not by inheritance. Our preventive measures therefore should be conducted along two lines: (1) The prevention of infection, and (2) the strengthening of the body to resist the attacks of the pathogenic agent. The latter can be accomplished by bringing up children with Spartan severity and by shunning every approach to coddling. The whole matter, then, so far as the second consideration is concerned, becomes a question of excellent living, of fortifying the physical, moral and intellectual faculties of the child; in other words, it is simplified education. The child should be taught the supreme importance of every deviation from the standard of health, so that it might be corrected at the earliest possible moment. He should adopt those forms of exercise whose object is the development of the muscular tissues, for with his blood enriched with good oxygen it will be well-nigh impossible for the bacillus to find a suitable source for propagation.

This means good air, the use of bath, open sleeping apartments, a suitable diet, and in a word, the use of every measure whose end is the development of the body. These excellent means cannot always be adopted, but parents as far as possible should be taught the absolute necessity of thus training their children.

When the disease has been contracted other means are to be used, and in the past change of climate was easily among the first. There is no question as to the beneficial effects to be derived from a change of climate in certain well-selected cases, but it is to the individual more than to the disease that we must

look before advocating such a measure.

Many poor consumptives have been sent hundreds and thousands of miles from their homes to die in some boarding house, surrounded by strangers, who might in all probability have been much better off to have remained where a kind word and a gentle touch would have at least alleviated the sorrowful parting. The change of diet, the depressing influence of being alone, the fear of rapid dissolution, these counterbalance many of the so-called benefits to be derived from a change of climate.

To one who returns cured from the South or the West hundreds die, and therefore it is that many physicians are chary of sending their consumptive patients traveling in an exhausted condition to some Western town, where they eke out a miserable existence for a few months.

Many considerations should govern physicians in the matter of selecting a suitable place for their patients, and the primary consideration should be the individual more than the disease, though the stage of the latter should receive due reflection. Professor von Leyden claims that the assumed specific action of fresh air in tuberculosis is one of the myths of medicine. It has no such action, but its value is purely of a hygienic character, since it adds greatly in strengthening the organism and rendering it more resistant to the attacks of the pathogenic organisms. To the nourishment of the consumptive he pays particular attention. The day for the universal prescription of cod-liver oil has passed. Experience has demonstrated that the more food the consumptive takes and digests the better are his chances of recovery. So far as alcohol is concerned, our ideas have been revolutionized. A plentiful supply of alcohol was considered an indispensable part in the past of the treatment. It is now given in much smaller quantity, for it is neither a suitable food nor a destroyer of germs. Hydrotherapy is a powerful agent in the treatment of phthisis, and consists in cold sponging, showers and short, cold

plunges. In Germany they have established "sanatoria" for the sole treatment of consumption, where the various measures spoken of can be carried out with precision and accuracy. The idea of forcible segregation of the tuberculous was abandoned as being only apparently humane and really inhuman in its consequences, but it resulted in the determination to establish public sanatoria where the poor could receive the same care as the well-to-do in private institutions. At present there are 20 sanatoria in course of construction or already in working order.

In this country only to a slight extent have we emulated the good example set us abroad. In the treatment of the large number of consumptives which abound in every

large city there is opened a field for philanthropic activity, second to no other agency of beneficence. The large general hospitals cannot treat tuberculosis as it should be treated, and it is a crying shame that in this metropolitan city there is but one institution devoted solely to the consumptive. This hospital—St. Joseph's—is conducted by the Sisters of St. Francis, who are doing all that human hands can do with the limited means placed within their power.

Voluntary subscriptions and contributions are their only means of support, but we trust that now, when the proper treatment and management of tuberculosis are commanding such deserved attention, an enlightened public opinion will demand public support.



Current Medical Literature.

DIAGNOSIS OF DIABETES FROM STAINED SPECIMENS OF THE BLOOD.

Ludwig Bremer describes a simpler method than the one which he originally proposed. A drop of blood is spread over a third or half a slide and is then exposed to a temperature of about 135 degrees C. for six to ten minutes. As this latter part of the procedure is important, it is discussed in detail. A temperature of 140 degrees should not be exceeded. When the thermometer registers 130 degrees the gas flame should be taken away from the oven. The optimum of temperature lies about 135 degrees, and below 129 degrees the test becomes unreliable. The slides are then placed in suitable dishes containing the stain. A control specimen must always be made. The eosin methylene blue preparation first used by the author is difficult to make and unreliable. Congo red, methylene blue, Biebrich scarlet and the Ehrlich-Biondi stain all give excellent results. The first three are used in 1 per cent. watery solution. After an exposure of one and a half to two minutes to Congo red the diabetic blood is either not stained at all or only indifferently so, while the non-diabetic blood is colored red. Methylene blue acts in an analogous way, but Biebrich scarlet stains the diabetic but not the non-diabetic blood. Ehrlich-Biondi's stain colors diabetic blood orange and non-diabetic blood intensely violet. Very successful specimens can be made if a contrast stain is used. Thus, specimens may be stained with a 1 per cent. watery methyl green for one and a half to two minutes, when both specimens appear green, but especially the diabetic blood. The counter stain is a 1 per cent. watery eosin applied for eight to ten seconds. The diabetic blood remains

green, but the non-diabetic stains red. Many other stains are mentioned, but the results obtained with them are not so good. The specimen may be taken out of the stain so that the staining can be controlled. Rapid washing and then drying are desirable. Whether the difference in reaction is due to the different alkalinity of the blood must still remain an open question.

—Centralbl. f. inn. Med., June 5, 1897.

MUSICAL MURMURS IN HEART DISEASE AND ANGINA PECTORIS.

Tecce draws attention to a special variety of musical heart murmurs which he describes as resembling a feeble groan or the chirping of chickens. For certain similar cases described by Capozzi, in which a constant lesion was found—namely, a regular perforation of a free valve—the author was led to diagnose such a condition in the case of a man, aged 30, who was admitted into hospital suffering from anginal attacks. On auscultation a double aortic murmur could be heard, the diastolic part of the murmur being musical, and like the chirping of chickens. The apex beat was in the fifth space, and outside the nipple line. There was no history of rheumatism, but the patient was much exposed to wet and cold. He contracted syphilis at 21. He died in one of the attacks of angina, and post-mortem the mitral valves were found normal, the aortic valves thickened, and stenosis, two cusps being adherent; the third was perforated near the aortic parietes, but not adherent. The coronary arteries were healthy. The aorta was atheromatous. The author looks upon angina pectoris as a neuralgia of the cardiac plexus.

—La Rif. Med., April 2, 1897.

**PROPHYLACTIC INJECTIONS
OF BEHRING'S SERUM.**

In the *Berliner klinische Wochenschrift* for August 9 Dr. F. Rauschenbusch describes a most interesting case in which toxic symptoms followed a prophylactic injection of Behring's antitoxic serum. There were two cases of diphtheria in the doctor's own house, and in order to prevent the extension of the disease to the other members of his household, each one (five in number) was injected with 200 units of antitoxic serum, all the five members being injected from the same bottle, which contained 1000 units. In four out of the five there were absolutely no untoward results, but in one of the three children (a perfectly healthy girl) curious symptoms developed very rapidly. This child, aged 10 years, five minutes after the injection developed a marked eruption at the seat of injection. This eruption rapidly extended up the thigh and on to the right side of the face. It was accompanied by very great itching, and ten minutes later the whole body, especially the face, was covered with a dark scarlatinal-red rash, and the child fainted. A warm bath relieved the itching, but as soon as the child was taken out it again fainted and remained in a collapsed condition until it was placed in a horizontal position. The radial pulse could not be felt on either side, and the heart, though regular, was exceedingly weak. The pupils were dilated, and were sluggish. The child was sleepy, it answered slowly, and the skin was cold and pale. The scarlatinal rash soon disappeared except on the face. Two hours after injection there was vomiting, after which the general condition of the patient improved, but the heart weakness remained. Eight hours later there was itching of the hands and feet, both of which, as well as the face, were swollen and edematous. There was some swelling in the mouth, giving rise to difficulty in swallowing. The condition of the heart continued to improve, but at this period the radial pulse was still almost imperceptible. The urine, of moderate amount, was of a dark red color, but it contained no albumen.

Next morning the heart was stronger, and the patient continued to improve. Dr. Rauschenbusch, while still believing in the efficacy of Behring's serum, comes to the conclusion that there must be individual predispositions which make it necessary that care should be exercised in administering this substance. It is interesting to observe, however, that the same girl two years before had been injected with 600 units during an attack of diphtheria, and that there had then been not the slightest reaction. The two younger children suffering from diphtheria also received 600 units, and were not affected in the slightest degree. It is evident from the whole history of this case that for some reason or other hemolytic changes had taken place with considerable rapidity. Whether this is due to peculiarities in the blood, to a want of coagulative power, or some similar condition, is at present a matter for careful consideration. This case is of very great interest to the practitioner who has to inject prophylactic doses of serum where diphtheria has obtained a footing in a household. Dr. Rauschenbusch's only suggestion is that the prophylactic dose should be diminished in amount.

—The British Medical Journal.

VARICELLOUS LARYNGITIS.

Harlez draws attention to this important complication of varicella, confirming the previous observations of Marfan and Halle, and adding other cases of his own. In all instances the symptoms were those of croup, and in fact such was the original diagnosis of each case; raucous cough, loss of voice, retraction, dyspnea, suffocative spasms, and asphyxia were constantly present, but in none of these cases was there the least appearance of membrane, and no Loeffler bacilli were ever found. The specific character of the disease was very clear, there being small circular ulcerations on the vocal cords, and often on the epiglottis. The author points out that this complication is more especially met with in children, particularly those of

weak constitution, and the younger the child the worse the prognosis. The character of the eruption also bears upon the prognosis, for in one case which recovered the eruption was discrete, while in some of the others it was of the hemorrhagic variety, and in one instance confluent. In the only case of recovery which came under the author's observation had there been resort to tracheotomy. In all the others death was due to either spasm of the glottis or broncho-pneumonia.

—Journ. de Med., June 25, 1897.

A CELEBRATED CASE.

Provost Pepper, of the University Hospital, Used this Man in His Clinics in 1894—No Hope in Medicine for Him—Now Getting Well by the Use of Rennyson Tredyffrin Water—No Other Remedy Used—A Letter From Him that Will Explain His Situation.

From the Star of the Cape, Cape May, N. J.

About one year ago Captain William Rennyson, editor of the Daily Times, Norristown, Pa., who owns a fine country seat in Tredyffrin Township, Chester County, accidentally discovered that the waters of a fine, strong spring were, upon analysis, of a highly medicinal character, and already it has the best reputation where known of any water sold and is uniformly preferred by those who have tried other mineral waters as more efficacious. The proprietor has already received a very large number of the strongest testimonials from the immediate region of the spring, so that when we were handed the booklet of testimonials we found that among those receiving the most remarkable cures were several personal acquaintances.

Mr. William H. Reeves, of West Cape May, a veteran, who has been greatly afflicted with rheumatism for 33 years, contracted in the army, has also experienced a wonderful change by the use of Tredyffrin water in a comparatively very short time, as described in his letter to

the proprietor of the celebrated mineral spring, given below:

Cape May, N. J., February 24, '97.
Capt. Wm. Rennyson, Norristown, Pa.

Dear Sir—I have been anxious for some time to write to you to acknowledge the debt of gratitude I owe you for the wonderful change your lithia water has wrought upon me.

I contracted rheumatism in the army from severe exposure, which gradually increased in suffering, until during the last ten years I have been almost entirely helpless in every way, not being able to walk for now over three years. And I had reached that stage when I could not raise my foot without pain and then not more than two inches without help. Indeed, it was with extreme pain that I was moved at all, and was not at any time free from great soreness and pain.

It was in this condition that a friend called upon me and spoke of his knowledge of great benefit which had been enjoyed by three or four of his acquaintances by the use of this valuable water. I, therefore, felt interested to give your water a trial. I did not expect in my long-confirmed case immediate benefit, but I was surprised that before I had finished taking the first bottle I felt some decided improvement in my appetite and sleeping. On account of my pains I could not for over two years sleep without the regular nightly use of morphia, but now I am free from the soreness and pain and sleep well throughout the entire night. And I have such use of my lower limbs now that I can lift them from the floor to a chair without the least pain.

I have been under treatment by some of the most celebrated physicians in Philadelphia, as well as the most noted in this section, for the last ten years, and derived no permanent benefit nor relief from my sufferings, and felt that I had nothing to look forward to but continuance in great pain and the probable aggravation of my disease and suffering to the end of my life. I am very anxious, therefore, in this condition to avail myself of the trial

of your excellent water, of which I have used less than two cases, with the blessed result mentioned above. And I feel that it is due to you, as well as to many sufferers like myself, that I should make my case known to the public.

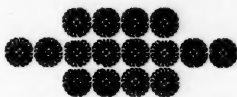
Yours respectfully,

WILLIAM H. REEVES.

Mr. Reeves is one of the most conscientious and best-known men in

this vicinity, having held among other offices of public trust the position of Assessor, both in Lower township and in the borough of West Cape May, for over 18 years. And to anyone wishing to consult Mr. Reeves as to the virtue and value of this water in his own case he will be only too glad to impart the fullest information.

Ed. Star of the Cape.



Current Surgical Literature.

T. H. MANLEY, M. D., New York, Editor.

THE MECHANICAL TREATMENT OF HEMARTHROSIS OF THE KNEE.

Salaghi draws attention to the value of massage and passive movements in the treatment of traumatic hemorrhage into the knee-joint. Cases of intraarticular fracture or rupture of ligaments are excluded, but in genuine hemarthrosis from contusion or sudden distortion (for example, in cycling accidents with hyper-abduction of the knee), massage gives excellent results by promoting rapid absorption of blood and lessening the chance of damage to the joint from changes in the effused blood. The author experimented on a rabbit by producing hemarthrosis in the two knees, massaging one and leaving the other alone. Judged by the swelling, etc., the lesion was the same in each joint. After a time the knees were examined. In the massaged joint the blood was absorbed and no changes of importance were detected. In the other joint three hematmata were seen in process of organization. In time they would have become loose bodies in the joint.

—Archiv. di Ortoped., An. 14, No. 4.

TREATMENT OF EXOPHTHALMIC GOITRE.

At a recent meeting (July 27) of the Academy of Medicine, of Paris, a paper by Jaboulay was read dealing with 9 cases of section of the cervical sympathetic for exophthalmic goitre. The results were good, both with

respect to the exophthalmos and to the goitre and palpitations. The best effect was obtained in young people in whom presumably the accelerator system of the heart was less developed and more thoroughly modified by the division of the sympathetic. In cases of failure of the treatment, an explanation might be found in the existence of two sympathetic cords in the neck—a not infrequent anomaly. At the same meeting Doyen reported two cases of exophthalmic goitre successfully treated by thyroidectomy. He preferred this operation to division of the cervical sympathetic, both on account of its safety and for its beneficial results. Such cases seemed to demonstrate the pathogenic role played by hypersecretion from the thyroid.

—Progres Med., June 31, 1897.

SUPPURATING CHONDRO-OSTEOSARCOMA OF BREAST.

St. Arnold, of Lucerne, describes an interesting case of this rare disease in a lady aged 67. She had noticed, in the spring of 1895, a swelling in the left breast, but her family doctor believed that it had already existed there for some time. Diagnosis at first was doubtful. The swelling grew steadily and became painful. After traveling the patient consulted a doctor at Zurich, and he diagnosed mammary abscess. As pus escaped he naturally believed, when he had made an incision, that his original opinion was correct. The

swelling, however, increased, and fever set in, with extension of inflammation to the circumference of the breast. The patient became exhausted and slightly delirious. Luning found the breast much swollen and surrounded with dilated veins and lymphatics. In the midst of the swelling was a cavity packed with iodoform gauze. Its walls were very firm, and it discharged fetid pus. The axillary glands were not enlarged. Lysol was freely applied, but the temperature rose over 105 degrees, and the patient seemed too weak for an operation. At the end of a week, after she had been under Luning's care she seemed worse, and nothing appeared of any avail except to remove the focus of suppuration. The breast was therefore amputated and the wound thoroughly drained. Two days later the fever had disappeared. Two months after the operation the patient was in excellent health, and there was no sign of recurrence. The tumor was very tough and full of small tuberculous masses. On examination St. Arnold found that it was a sarcoma containing bone and cartilage.

—Virchow's Archiv, Vol. cxlviii, part 3, June, 1897.

PERFORATION OF THE GALL BLADDER.

Fuchs relates an interesting case following upon an acute cholecystitis, and successfully treated by operation. A woman, aged 27, was seized on the fifth day after labor with severe pain in the epigastric region, and radiating into the back. The attack lasted for half an hour, but a second attack occurred a fortnight later, and was followed by slight jaundice. Two days later there was a further attack. The

next attack, two days afterward, was very severe, and on the following day the patient was very ill. The abdomen was distended and there was great tenderness and prominence in the region of the gall bladder. The diagnosis of perforation of the gall bladder with a commencing peritonitis was made. The operation was begun by Mikulicz about 24 hours after the onset of these severe symptoms. A fibrinous deposit was seen upon the intestines. The greatly distended gall bladder was exposed and punctured, 40 c. cm. of a turbid, ill-smelling fluid being drawn off. The gall bladder was then opened, and the finger introduced, when an opening was found near the cystic duct leading into an abscess cavity. Thirty-four stones were extracted from this cavity. The common bile duct was distended, but contained no stone. The abscess cavity was washed out and a drainage tube inserted. The infected part of the peritoneal cavity was tamponed with iodoform gauze. The patient's progress was very satisfactory. Eleven days after the operation the drainage tube was shortened and the iodoform gauze tampon discontinued. Eventually the wound closed, so that the patient left her bed about four weeks after the operation. The author would look upon the case as one of acute ("idiopathic") cholecystitis accompanied by severe septic manifestations and complicated by perforation of the gall bladder. He would appear to think that it arose independently of the gall stones present in the case. A limited fibrino-purulent peritonitis was present. Thus the case is to be placed alongside other cases of perforative peritonitis cured by operation.

—Berl. klin. Woch., July 26, 1897.



Current Literature in Obstetrics and Gynecology.

PRIMARY TUBERCULOSIS OF THE EXTERNAL FEMALE GENITALS.

De Paoli reports five cases of primary tuberculosis of the external female genitals, which is not so rare as generally believed. Children and adults are alike liable to be affected, and this may occur by direct inoculation, for example, through sexual intercourse. The tuberculous lesions are localized in the early stages, by preference, around the urinary meatus and clitoris, whence they are slowly diffused. Clinically it is characterized by more or less extensive ulceration, with elephantiasis-like thickening of the labia. The course is chronic, and the disease may remain for a very long period localized in the external genitalia. The inguinal glands are not affected as often as one might expect. Extensive local disease may exist without causing notable alteration in the general health. Histologically there is a rich inflammatory infiltration and abundant vascularization of the altered tissues. Caseous degeneration is rare, and there is a tendency to spontaneous repair. Secondary tuberculosis of these parts presents a more rapid course and a greater malignity. Energetic surgical intervention may bring about a complete cure, and resection even of extensive portions of the urethra may be practised without materially disturbing the emission of urine.

—Annali dell' Univers. di Perugia, Vol. ix, f. 1.

PREGNANCY AND SYPHILIS.

Edward P. Davis advises inspection of the genital tract before making a diagnosis of syphilis. The anemia of syphilis was responsible for its most dangerous effect upon pregnancy. If iron and arsenic were given freely, with inunctions of mercury, the woman might be carried through. Anemia was very important in syphilitic children also. The mother was often in such bad condition that modified milk was better for the child. Syphilis sometimes caused an endometritis, though there might be no other symptoms of the disease.

—Amer. Journ. Obstet., June, 1897.

IS THE VAGINA IN NORMAL PREGNANCY ASEPTIC?

Goenner has carefully investigated the normal secretion of the vagina in healthy pregnant women. He finds that it contains anaerobic bacteria, not such as cause primary septic endometritis, but those which can be easily introduced from without. As in the case of streptococci which set up puerperal fever, the germs in the vagina do not represent auto-infection, but are brought there by the medical attendant, the midwife, the nurse or the instruments. Septic endometritis, often indicated by fetid liquor amnii, may be excited by the bacterium coli.

—Centralbl. f. Gynak., No. 24, 1897.

THE PNEUMOCOCCUS IN PREGNANCY.

Vinay observed a patient who suffered from great gastric irritability during pregnancy. Multiple abscesses appeared during the seventh month; the pneumococcus was found in the pus. The patient died 19 days after delivery.

—*Revue Obstet. Internationale*, May 21, 1897.

DECIDUAL TISSUE IN PERITONEUM IN NORMAL PREGNANCY.

Schmorl confirms a very important observation of Pels Leusden that lit-

tle nodular masses of tissue resembling decidua may be found in the pelvic peritoneum in normal pregnancy. He examined 30 bodies. These nodules were once thought to signify abdominal gestation. He declares as a rule the peritoneum of Douglas' pouch is thickly studded with these collections of tissue; the ovaries also bear them. The decidual-like material appears to develop in the subserous connective tissue and undergoes absorption or calcification after delivery. The deposit is typical of pregnancy.

—*Monatschrift f. Geburtshulfe u. Gynak.*, Vol. v, 1897, part 1.

**Miscellany.****TREATMENT OF EPILEPSY.**

Percy Bryant alludes to the repeated failures to find a morbid anatomy for idiopathic epilepsy in the nervous system, and holds that such facts as are known concerning the cause of convulsive seizures, as illustrated by uremia, etc., point rather to a toxemic origin than to any pathological change in the brain or spinal cord. The following method of treating epilepsy has been adopted with considerable success during the last five years at the Buffalo State Hospital: The administration of bromides has been abandoned as unnecessarily severe, and as useless in that their good effect is merely temporary; in fact, Bryant goes so far as to say that their exhibition really adds another condition, which has to be contended with, namely that, added to the epilepsy which has not been cured there is now bromism, developed as a result of treating the former disease. His treatment, briefly, is a combination of a milk diet with suitable exercise and the immediate relief of any symptoms of constipation by cathartics and enemata. A patient suffering from the psychical manifestations of the disease is purged and has all nourishment en-

tirely withdrawn for a sufficient length of time to give the requisite rest to the digestive organs, nothing but water being meanwhile allowed. At the end of two days abnormal hunger disappears. After three or four days of this abstinence—even eight or ten days in the case of violent mania or status epilepticus—a small quantity of milk is allowed; this is gradually increased from one to six glasses between morning and evening, and persisted in for several weeks, if not months. The condition of the digestive organs is to be the guide, and not the physical condition of the patient. After two to four months a gradual return to the regular diet is permitted, but an immediate resort to the above is to be had on the reappearance of any symptoms of toxemia. Drugs aiming at intestinal antiseptics, however, theoretically indicated are in practice found to be able to exert but feeble antiseptic powers. Chronic idiopathic epilepsy is incurable, and, at the best, only amelioration of the symptoms can be hoped for. It is only during the early stages of the disease that substantial results from treatment can be expected.

—*State Hospitals Bulletin*, October, 1896.

THE PATHOLOGY OF APPENDICITIS.

Abbe, in a paper on the "Appendix 'in the Interval,'" describes a new method of preparing this organ after resection, which, it is stated, shows the causes of appendicitis in its several varieties, and affords an explanation of the clinical symptoms of chronic cases. The removed appendix is distended with alcohol (95 per cent.), and after immersion for 24 hours in alcohol of the same strength, sliced from end to end. Whereas the outside may preserve the cylindrical form of a normal appendix, the interior—if the patient has had one or more attacks—will show one or several of the following conditions: (1) A fecal concretion blocking the canal, (2) interior ulcerations, (3) cicatricial strictures, (4) multiple strictures with intermediate pockets containing suppurating and catarrhal products, and confined by greatly hypertrophied muscular and mucous coats, (5) partial obliterating appendicitis. The author's study has led him to assign three distinct causes of obstruction of the appendix, which leads to gangrene, perforation or rupture. Catarrhal inflammation alone, it is believed, may be followed by stricture. A natural point of flexure in the appendix, due usually to localized shortening of the mesentery, may lead to an arrest of its fecal contents, which, becoming inspissated, grew into a concretion. Thirdly, an otherwise healthy appendix may be effected by circular ulceration, due

probably to microbic action. Abbe is a strong advocate of removal of a chronically inflamed appendix. Spontaneous cure certainly may occur, but the patient in the course of the curative process will run the gauntlet of many attacks in which distension of the pockets between the strictured portions may cause fatal results. Moreover, the final obliteration of the canal will not always relieve the patient of pain.

—Medical Record, July 10, 1897.

The American Pediatric Society is making a collective investigation of infantile scurvy, as occurring in North America, and earnestly requests the co-operation of physicians, through their sending of reports of cases, whether these have already been published or not. No case will be used in such a way as to interfere with its subsequent publication by the observer. Blanks containing questions to be filled out will be furnished on application to any one of the committee. A final printed report of the investigation will be sent to those furnishing cases.

(Signed)

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